

ABSTRACT

A semiconductor integrated circuit includes a capacitor element which defines a prescribed decay time constant with one or more resistors, an MOS transistor  
5 connected to the capacitor element via its gate, and a constant current generating element which generates a constant current. The capacitor element is charged with the constant current so as to create a linearly changing voltage. The linearly changing voltage is applied to the gate so that  
10 the MOS transistor can accordingly output a smoothly changing current.